



- KEY**

 1. METER BASE PER SERVING UTILITY REQUIREMENTS. AS A MINIMUM, THE METER BASE SHALL BE SAFETY SOCKET BOX WITH FACTORY INSTALLED TEST BYPASS FACILITY THAT MEETS THE REQUIREMENTS OF EUSERC DRAWING 305.
 2. MAIN BREAKER (SEE BREAKER SCHEDULE)
 3. PHOTOCELL BREAKER (SPST 15 AMP - 120/240 VOLT)
 4. TEST SWITCH (SPDT SNAP ACTION, POSITIVE CLOSE 15 AMP - 120/277 VOLT "T" RATED)
 5. PHOTOELECTRIC CONTROL, STD. SPEC. 9 - 29.11(2)
 6. BRANCH BREAKER (SEE BREAKER SCHEDULE)
 7. SIGNAL TRANSFORMER BREAKER (SEE BREAKER SCHEDULE)
 8. CONTACTOR (SEE BREAKER SCHEDULE)
 9. RECEPTACLE BREAKER (SPST 20 AMP - 120/240 VOLT)
 10. RECEPTACLE, GROUNDED (GFCI 20 AMP - 125 VOLT)
 11. NEUTRAL BUSS, 14 LUG COPPER
 12. PHOTOCELL ENCLOSURE - ENCLOSURE TO BE FABRICATED FROM 5/8" EXPANDED STEEL MESH WITH WELDED SEAMS AND MOUNTING FLANGES. HOT DIP GALVANIZED AFTER FABRICATION. TYPE 5052 - H32 ALUMINUM WITH 5/8" x 5/8" OPENINGS EQUIVALENT TO 5/8" EXPANDED STEEL MESH MAY BE USED AS ALTERNATIVE MATERIAL. SEE PHOTOCELL ENCLOSURE MOUNTING DETAILS, STANDARD PLAN J-3b.
 13. HINGED FRONT FACING DOOR WITH 4" x 4" MIN. POLISHED WIRE GLASS WINDOW.
 14. HINGED DEAD FRONT WITH 1/4 TURN FASTENERS OR SLIDE LATCH
 15. CABINET MAIN BONDING JUMPER. BUSS SHALL BE 4 LUG TINNED COPPER. SEE CABINET MAIN BONDING JUMPER DETAIL, STANDARD PLAN J-3b.
 16. SPARE BRANCH BREAKER (DPST 20AMP- 120/240 VOLT)
 17. METAL WIRING DIAGRAM HOLDER
 18. REMOVABLE EQUIPMENT MOUNTING PAN
 19. 6" x 6" MIN. UNDERGROUND FEED - SERVICE WIREWAY (LEFT REAR CORNER)
 20. SCREENED VENTS, 2 REQUIRED, 1 EACH SIDE, LOUVERED PLATES
 21. HEATER BREAKER (SPST 15 AMP - 120/240 VOLT)
 22. THERMOSTAT, 40°F CLOSURE - 3 DIFFERENTIAL
 23. STRIP HEATER (100 WATT NOMINAL), WITH TERMINAL STRIP COVER
 24. TRANSFORMER BREAKER (DPST 15 AMP - 480 VOLT)
 25. DRY TRANSFORMER (480/120 VOLT) 3 KVA COPPER BUSSED AND COPPER WOUND
 26. RESERVED FOR METER, CURRENT TRANSFORMER AND/OR DISCONNECT SWITCH AS REQUIRED BY THE UTILITY
 27. 24 CIRCUIT PANEL BOARD - MINIMUM SIZE WITH SEPARATE MAIN BREAKER.
 28. LABEL CABINET WITH BUSSWORK RATING
 5. THE FOLLOWING EQUIPMENT WITHIN THE SERVICE ENCLOSURE SHALL HAVE AN APPROPRIATELY ENGRAVED PHENOLIC NAME PLATE ATTACHED WITH SCREWS OR RIVETS: KEY NUMBERS 2, 3, 4, 6, 7, 8, 9, 16, 21 AND 25. KEY NUMBER 4 NAME PLATE SHALL READ: "PHOTOCELL BYPASS TEST ON" AND "PHOTOCELL TEST OFF- AUTOMATIC". SEE SERVICE CABINET DETAIL.
 6. METERING ARRANGEMENTS VARY WITH DIFFERENT SERVING UTILITIES. THE UTILITY MAY REQUIRE METER BASE MOUNTING IN THE ENCLOSURE, ON THE SIDE, OR ON THE BACK OF THE ENCLOSURE. THE UTILITY MAY REQUIRE THE DIMENSION BETWEEN THE DOOR AND THE FRONT OF THE SAFETY SOCKET BOX TO BE LESS THAN THE 11 INCHES SHOWN IN THE LEFT SIDE- SAFETY SOCKET BOX MOUNTING DETAIL, SEE STD. PLAN J-3b. THE CONTRACTOR SHALL VERIFY THE SERVING UTILITY'S REQUIREMENTS PRIOR TO FABRICATION OF AND INSTALLING THE SERVICE EQUIPMENT.
 7. THE DIMENSIONS SHOWN ARE MINIMUM AND SHALL BE ADJUSTED TO ACCOMMODATE THE VARIOUS SIZES OF EQUIPMENT INSTALLED.
 8. ALL BUSSWORK SHALL BE HIGH GRADE COPPER AND SHALL EQUAL OR EXCEED THE MAIN BREAKER RATING. ALL BREAKERS SHALL BOLT ONTO THE BUSSWORK. JUMPERING OF BREAKERS SHALL NOT BE ALLOWED. BUSSWORK SHALL ACCOMMODATE ALL FUTURE EQUIPMENT AS SHOWN IN THE BREAKER SCHEDULE.
 9. THE PHOTOCELL UNIT SHALL BE CENTERED IN THE PHOTOCELL ENCLOSURE TO PERMIT 360 DEGREE ROTATION OF THE PHOTOCELL WITHOUT REMOVAL OF THE PHOTOCELL UNIT OR THE PHOTOCELL ENCLOSURE.
 10. ALL INTERNAL WIRE RUNS SHALL BE IDENTIFIED WITH "TO - FROM" CODED TAGS LABELED WITH THE CODE LETTERS AND/OR NUMBERS SHOWN ON THE SCHEDULES. APPROVED PVC OR POLYOLEFIN WIRE MARKING SLEEVES SHALL BE USED.
 11. ALL NUTS, BOLTS, AND WASHERS USED FOR MOUNTING PHOTOCELL ENCLOSURE SHALL BE STAINLESS STEEL.
 12. A 1% TOLERANCE IS ALLOWED FOR ALL DIMENSIONS.
 13. SEE PLANS FOR BREAKER SCHEDULE.
 14. INSTALL CONDUIT COUPLINGS ON ALL CONDUITS. PLACE COUPLINGS FLUSH WITH TOP OF CONCRETE FOUNDATION.
 15. SEAL CABINET TO FOUNDATION WITH A 1/2" BEAD OF SILICONE. APPLY SILICONE TO DRY SURFACE ONLY.
 16. THE METER BASE PORTION OF THIS SERVICE WAS DESIGNED TO MEET METERING PORTION OF EUSERC DRAWING 309 REQUIREMENTS.

200 AMP TYPE 240/480 1Ø SERVICE CABINET

1. SEE STD. SPECIFICATION 9-29.24, SERVICE CABINETS.
2. HINGES SHALL HAVE STAINLESS STEEL OR BRASS PINS.
3. CABINETS SHALL BE RATED NEMA 3R AND SHALL INCLUDE TWO RAIN TIGHT VENTS.
4. METERING EQUIPMENT DOORS SHALL BE PAD LOCKABLE. EACH DOOR SHALL BE GASKETED. INSTALL BEST CX CONSTRUCTION CORE ON BOTTOM LEFT AND RIGHT DOORS. SEE DOOR HINGE DETAIL, STD. PLAN J-3b; CONCEALED HEAVY DUTY STAINLESS STEEL LIFT OFF HINGES ARE ALLOWED AS AN ALTERNATIVE. UPPER LEFT DOOR SHALL HAVE 3 HINGES, LOWER LEFT DOOR SHALL HAVE 2 HINGES, AND RIGHT DOOR SHALL HAVE 3 HINGES. LOWER DOOR SHALL HAVE A TWO POSITION DOOR STOP ASSEMBLY.

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.



EXPIRES MAY 5, 2003

**SERVICE CABINET TYPE E
(0 - 200 AMP TYPE 240/480
SINGLE PHASE)
STANDARD PLAN J-3d**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Harold J. Peterfeso 06-24-02

STATE DESIGN ENGINEER

DATE _____



Washington State Department of Transportation